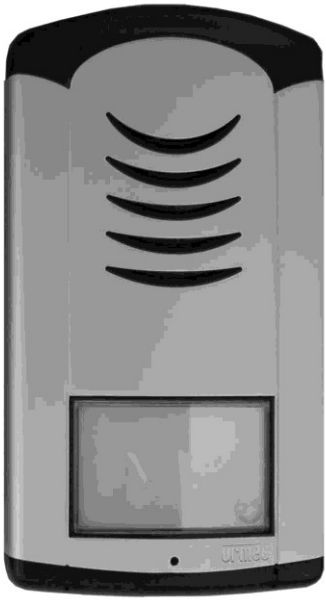
DoorPhone VoIP

Slim IPDP – 01
Slim IPDP – 02
Slim IPDP – 01C
Slim IPDP – 02C
Slim IPDP – 01C antivandal



Installation and Operating Instructions

Welcome

We congratulate you on purchase of "**Slim IP Door phone -VoIP**" (VoIP = Voice over IP), which is the improved version of successful "New DoorPhone" (NUDV). This DoorPhone VoIP will widely manage to satisfy your needs of communication with persons at the building front door or your company entry, or family house doorway. The universality lies in possibility to connect this guard to an Ethernet network or VoIP exchange or directly to SIP server through internet conection.

The basic DoorPhone VoIP module ***Slim IPDP-01*** is supplied with 1 button, ***Slim IPDP-02*** is supplied with 2 buttons The next version of basic VoIP modules (***Slim IPDP-01C*** and ***Slim IPDP-02C*** or ***Slim IPDP-01C antivandal***) is with integrated colour camera.

The Doorphone is supplied from AC/DC powersupply 12V or receives power through the PoE (Power over Ethernet) technology. No additional cabling fot power is therefore necessary.The basic features include the possibility to open up to two doors by means of connected electrical locks (the buttons can be used for door code opening). IPDP is configured over an integrated web server, which can be controlled from any web browser, e.g., IE, Mozilla Firefox.

The manufacturer continuously improves the product firmware. The technology used allows you to upload to IPDP the latest version of the firmware any time using a standard computer. The latest version of the firmware is available at
http://www.alphatech.cz/ipdp-firmware/e_firmware.htm
You will find the necessary on page 29 of this manual. We recommend that you use the latest version of the firmware, which brings new functions and patches. At http://www.alphatech.cz/engl/e_ipdp-slim.htm you will also find the latest version of the user documentation.

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1 Basic Description

1.1 Features

- Voice communication is supplied only from telephone line
- Two 25digit numbers (IP adress) with each button
- Commands can be used for a doophone two or a single digit (command 55 is reduced to 5 so that we save * 5 instead of the original 55)
- Day/night switching - automatic week program
- Possibility of the call extension by * or # choice
- Possible to connect two independent locks for door opening
- Possible use of 5 switch modes (e.g. camera, lighting, gradual opening)
- Two codes for hanging up the doorphone from telephone
- Two codes for door opening from telephone
- Six code locks (password from buttons at the door)
- two inputs for door sensors (open / close door)
- Power supply 12V AC/DC, 500mA max or PoE technology (IEEE802.3af Altern. A+B)
- White LED for automatic ligting for camera
- Permanent lighting through visiting cards
- Included color camera (autofocus)
- Ethernet – 10/100Mb with standard 10BaseT a 100BaseTx
- Web server for remote configuration – BOA
- Operating system – Linux 2.6
- USB for connection internal camera – USB guest 1.1, software GSPCA software for video transmission to the browsers in PC – W3CAM(J-PEG, RTSP Streem) and stream H.263, H.264
- SIP connection P2P or PBX network system
- WEB – firmware upgradeable
- WEB – interface for control and setup parameters

1.2 Terminology

- **Ethernet** is a family of frame-based computer networking technologies for local area networks (LANs).
- A **local area network** (**LAN**) is a computer network covering a small physical area, like a home, office, or small group of buildings, such as a school, or an airport
- **10BASE-T** runs over four wires (two twisted pairs) on a Category 3 or Category 5 cable.
- **100BASE-TX** Uses two pairs, but requires Category 5 cable (FastEthernet)
- **Twisted pair** cabling is a form of wiring in which two conductors (the forward and return conductors of a single circuit) are twisted together for the purposes of canceling out electromagnetic interference (EMI) from external sources.
- **UTP** (unshielded twisted pair) cable is not surrounded by any shielding.
- **STP** (shielded twisted pair) cables are often shielded in attempt to prevent electromagnetic interference.
- The **World Wide Web** (commonly abbreviated as the "**Web**") is a system of interlinked hypertext documents accessed via the Internet.
- **Hypertext Transfer Protocol** (**HTTP**) is an application-level protocol for distributed, collaborative, hypermedia information systems.
- **Universal Serial Bus** (**USB**) is a serial bus standard to connect devices to a host computer.
- A **video codec** is a device or software that enables video compression and/or decompression for digital video. **H.264** is a standard for video compression, and is equivalent to **MPEG-4 AVC. H.263** is a video codec standard originally designed as a low-bitrate compressed format for videoconferencing. **MPEG-4** is collection of methods defining compression of audio and visual (AV) digital data.
- **JPEG** is a commonly used method of compression for photographic images.
- **Voice over Internet Protocol** (**VoIP**) is a general term for a family of transmission technologies for delivery of voice communications over IP networks such as the Internet.
- The **Internet Protocol Suite** (commonly known as **TCP/IP**) is the set of communications protocols used for the Internet
- An Internet Protocol (**IP**) **address** is a numerical identification and logical address that is assigned to devices participating in a computer network utilizing the Internet Protocol for communication between its nodes.
- **Dynamic Host Configuration Protocol** (**DHCP**) is a network application protocol used by devices (*DHCP clients*) to obtain configuration information for operation in an Internet Protocol network.
- The **Internet** is a global system of interconnected computer networks that use the standardized Internet Protocol Suite (TCP/IP).
- An **intranet** is a private computer network that uses Internet technologies
- **Power over Ethernet** or **PoE** technology describes a system to transfer electrical power, along with data, to remote devices over standard twisted-pair cable in an Ethernet network (we use only PoE standard IEEE802.3af Altern. A+B)
- **Network Time Protocol** (**NTP**), a means of synchronizing clocks over a computer network.

1.3 Module Assembly

The Slim IPDP are the basic modules with color camera Slim IPDP-01/02C or without camera Slim IPDP-01/02. Antivandal panel is very strong metal cover for increased endurance against vandalism.

Slim IPDP-01 Slim IPDP-02 Slim IPDP-01C Slim IPDP-02C
(Slim IPDP-01C antivandal)

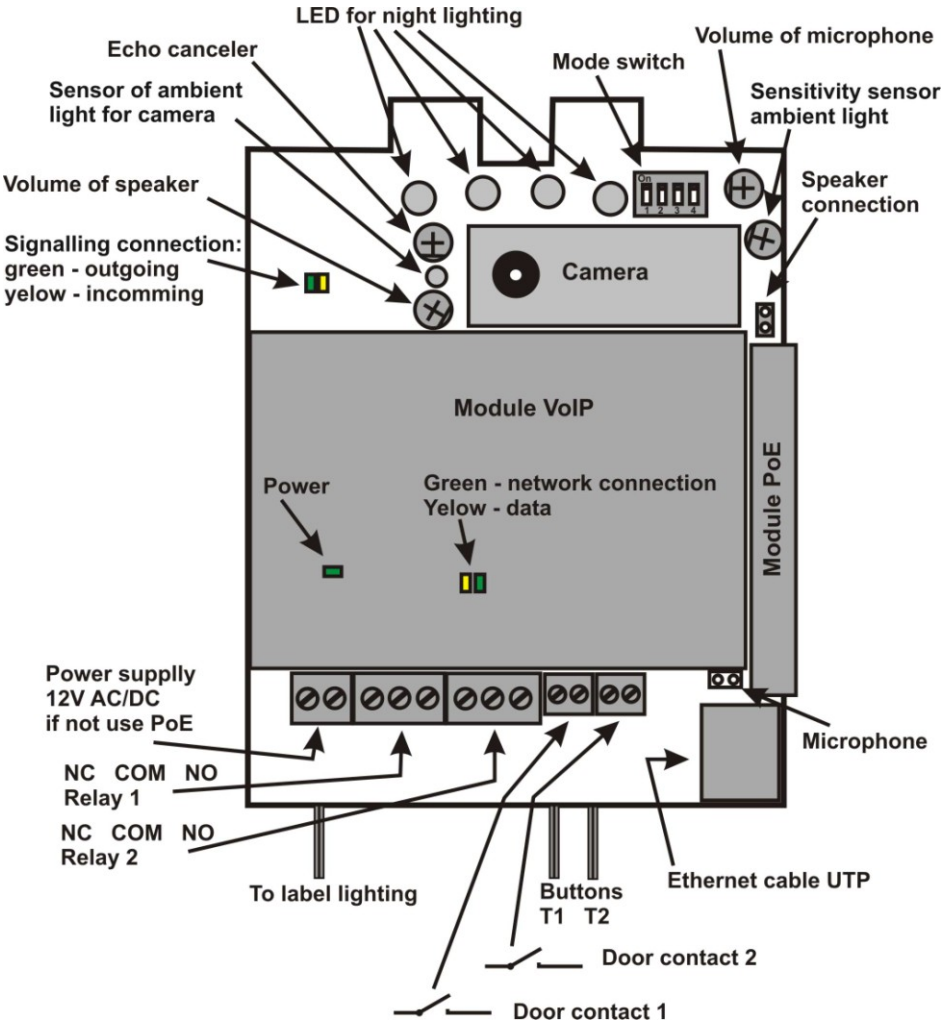
1.4 Module Features

1.4.1 Slim IPDP Basic Module

The Slim IPDP basic module is assembling from modules IP, PoE mudul, camera module and motherboard. Positioning setting elements and connectors are on picture 1.

For Slim IPDP is necessary used PoE power from switch or the AC voltage of min. 11Vst - max. 15Vst or DC voltage of min. 12Vss to max. 18Vss must be energized to "**12V**" terminal. This source loading depends on number of modules, since it simultaneously serves feeding of lighting through visiting cards – at max. number of connected modules the demand will not exceed 300mA. This source can be also used for feeding of lock(s), and then it is necessary to consider the electrical lock demand. In practice the alternating feeder 12V/1A mostly meets these demands.

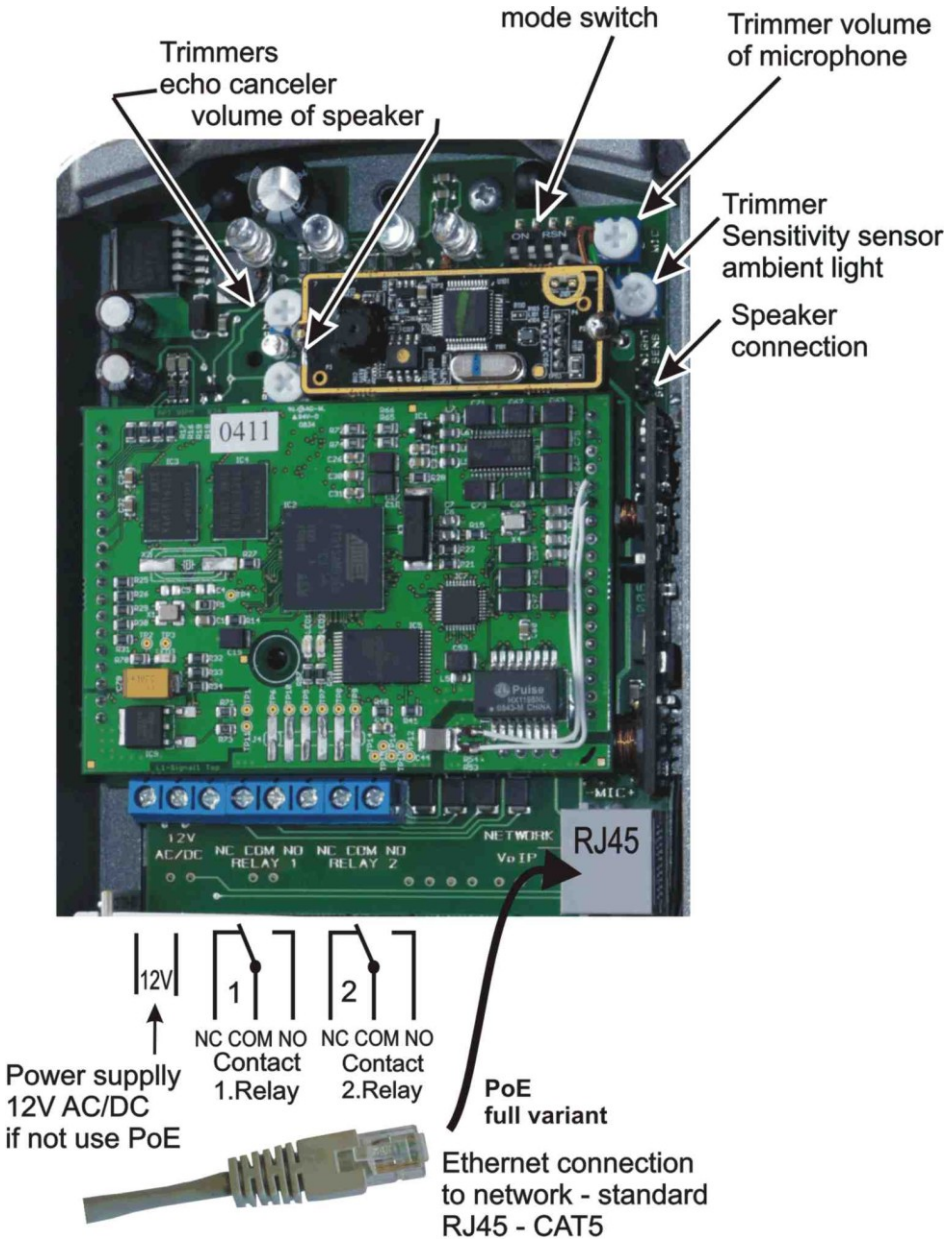
IPDP receives power through the PoE (Power over Ethernet - IEEE802.3af Altern. A+B) technology. No additional cabling is necessary. If your Ethernet is not equipped with the PoE technology it is possible to use a PoE adaptor. If you use electric lock for opening door, so you must for supply of the lock use power supply (only in circuit with relay - contact), or use low power lock and for supply of the lock use connector on visiting - card (back lighting buttons) and at supply by PoE is here 12V/350mA to disposal. Picture 4.



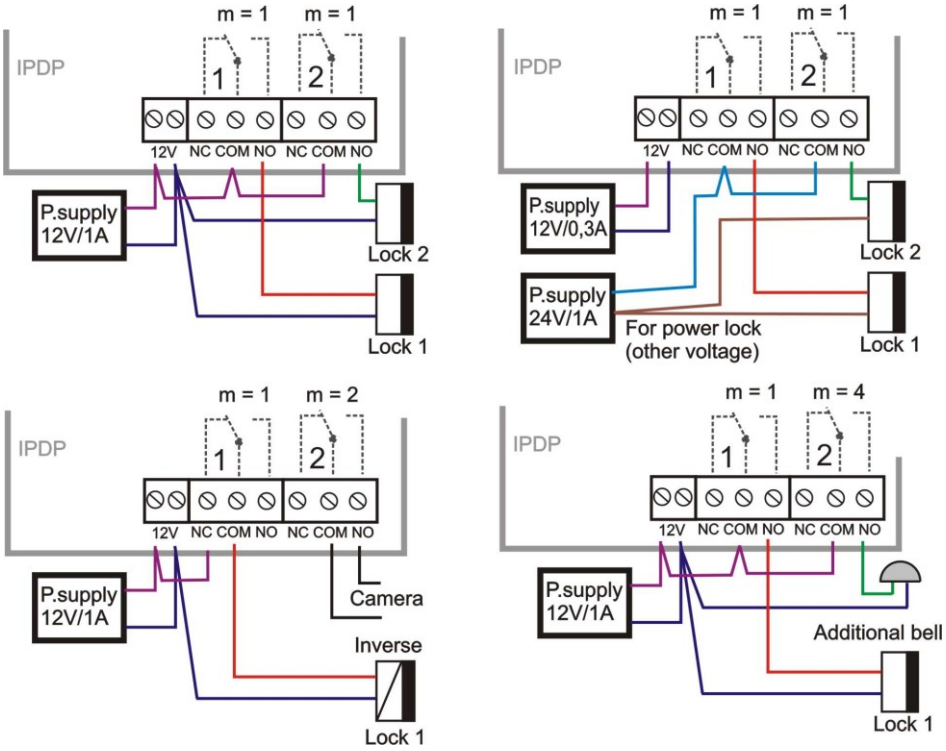
Picture 1 Basic module - motherboard

The connection of relay contact terminals is shown on pict. 2. The "**NO**" designation means an idle-disconnected contact, "**COM**" means a pin contact (middle) and "**NC**" means an idle-connected contact. The contacts of both switches are galvanically isolated each other and from other guard circuits. The variants of connection are shown on picture. 3 and 4.

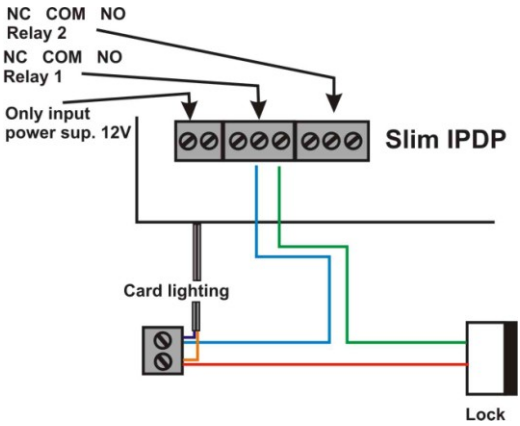
The **camera** is mounted so that it can be tilted in the vertical direction (up-down) so that optimal image occupy space in front of, or granted for the installation of disabled people.



Picture 2. Connect Slim IPDP



Picture 3 Examples of relays connections

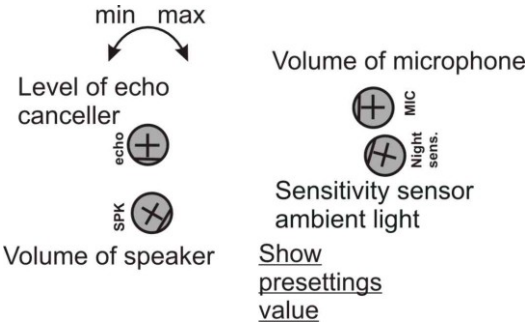


Picture 4 Examples of relays connections powered by PoE

ATTENTION - lock is must be low power consumption, max 350mA.

In newer versions available Slim IPDP function door sensor. Refer. page 34.

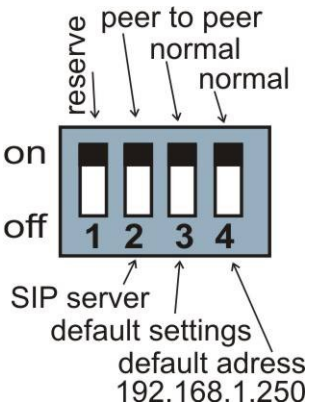
Setting voice communication – position trimmers are presetting from manufacture and in majority case agree with, therefore changes setting altering only in necessary case. Basic position of trimmers, sense of rotation and meaning trimmers are illustration on picture 5.
Level of echo canceler adjust silence of the microphone, to make smaller acoustic feedback and remove the echo
setting sensitivity of sensor ambient lighting determine at what decrease ambient light will be automatically switching lighting LED for camera. This function is accesible only if is activated IPDP (by talking).



Picture 5 Setting of trimmers

On picture 1. is **two inputs** for sensors in your IPDP. Door sensors are sensors (eg magnetic contacts or part of electrical lock) to inform the opening / closing doors. Check this option to display the status of the door to the home screen video and sends this information to the program UDVguard where it is displayed. Also information about status of this inputs is displayed on first WEB site with video in WEB browser.

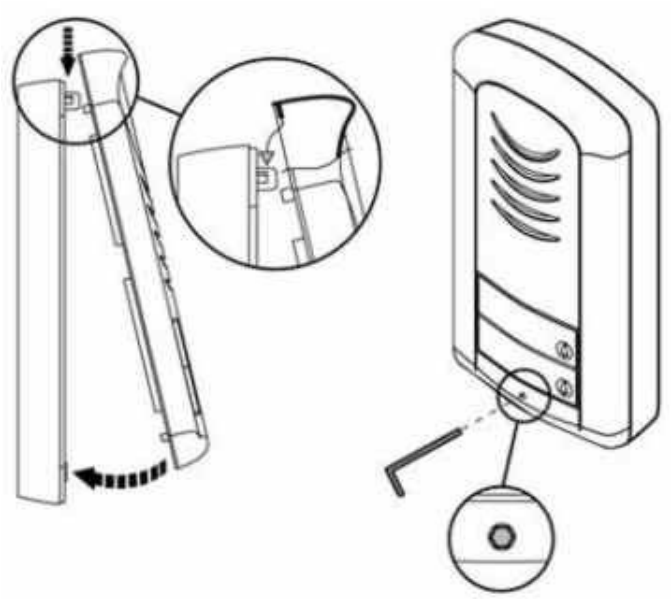
DIP switch setting basic operation and default setting. See on picture 6.
State of DIP switch is reading at start the IPDP, i. e. after reset. After get started system is necessary DIP switch 3 and 4 always return to the position "On", because at next reboot system would be new values overwriting by default value.



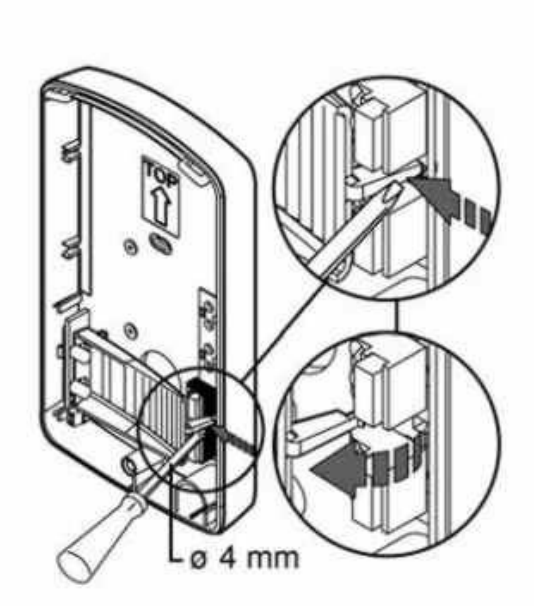
Picture 6 DIP switch settings

1.5 Installation of DoorPhone VoIP Assembly

1.5.1 Open and close the cover of Slim IPDP

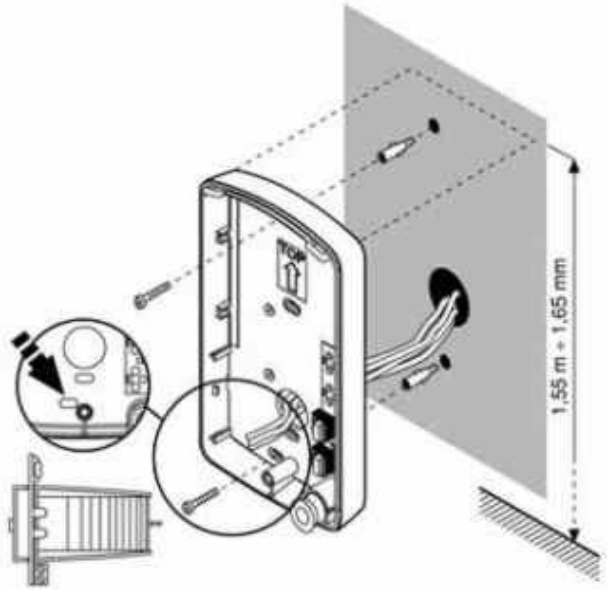


1.5.2 Dismounting lighting of nameplate

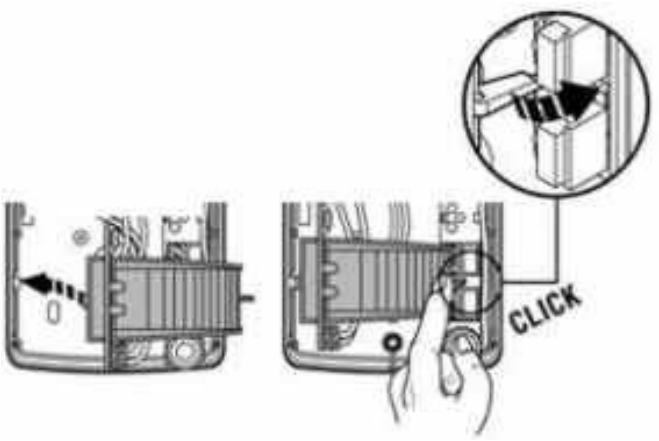


1.5.3 Assembly Slim IPDP on the wall

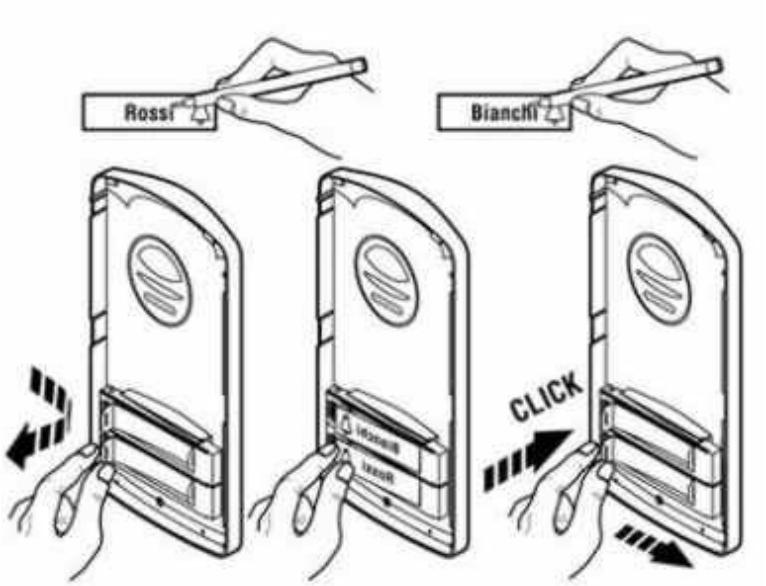
The installation is made by screwing to the wall by means of dowels.



1.5.4 Return lighting name plate after mounting on the wall.



1.5.5 Change of nameplates

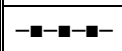
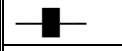
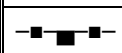
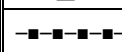


Each button has its separate nameplate hold by means of plastic flag (see figure). The paper nameplates can be printed from Excel form (to be downloaded on www.alphatech.cz/engl/basic.htm).

2 DoorPhone VoIP Operation

2.1 Signaling Overview

The IPDP signals an acoustic conditions they may occur during operation. Another signaling can be done by means of red LED (placed under microphone hole). You can listen the signaling samples in Nset setting program.

Condition	Tones	Tone frequency	LED
Line lifting up		425-850-1275	Light
Line hanging up		1275-850-425	Dark
Report after calling		425-850-1275	Light
Notice about call end		1275	Light
Parameter confirmation			
Switch on (Reset)		1275-850-1275	Blink
Error (anything, if unsuitable)		425….	
Empty memory (no progr. numb.)		850-1275-1700…	
Waiting to talk	-	-	Blinking
Is talk	-	-	light

2.2 Visitor at Door

The IPDP function is influenced by setting of IPDP parameters.

The DoorPhone **buttons** are provided by nameplates or positions of persons inside the object. The incoming person will press the corresponding button, the DoorPhone will lift up the VoIP canale neither immediately (the button is not the first number from code lock), or with delay and dial the programmed phone number thru VoIP, but dial number differs by choice mode, which is set in the DoorPhone :

- **Day/night** mode = being the DoorPhone in Day mode, so it is always dialing a number set in table 1, in Night mode, it is always dialing a number set in table 2. . Switching is possible use manual (two codes) or automatic (table "Day intervals") and here you can set the switch to three day intervals for 7 days a week. To facilitate proper function is to set the IP address of the NTP server and network settings so that the DoorPhone IPDP should have access to the Internet. In automatic mode, day / night mode is also possible to use a temporary manual switch, which cancels the first passage of the next automatic switching interval.

- mode **two number group** = first press – it always dials a number set in table *1*. By repeated press of the same button or detection of busy tone after dialing the DoorPhone will select the number from the second group (*table 2*). The next press of the same button again selects a number of the first group, etc.....

The switch (**code lock**) can be controlled by first 1-2 buttons of DoorPhone. If the visitor at door presses buttons in such combination that meet the preprogrammed code and the time among presses is not bigger than the set point, then the DoorPhone will pick up and close the corresponding switch (if set in m=1 or m=5 modes) to the period given by seting in parameters. Then it will hang up.

2.3 Person Inside Object

The person inside object is considered a person that is in phone contact with DoorPhone.

2.3.1 Outgoing Call

The outgoing call is the call from DoorPhone (caused by visitor). After guard choice the telephone is ringing inside object and the pickuping up will allow speaking to the visitor at door. The code choice can close the switch, if set to m=1 or m=5 modes, change over the Day/Night modes and hang up the DoorPhone. The DoorPhone in 10 seconds before call end will send a notice about call end and the call may be extended by sign selection (* or #). The telephone hanging up will end the call.

They are two possible means transmission information of push buttons (command for opening lock, switch-over day/night, prolongation conversation, command for hang-up) - by either in "RTP channels" or in "SIP info", variant "inband DTMF" isn't in IPDP decoding.

2.3.2 Incoming Call

The incoming call is the call to the DoorPhone (caused by person inside object). After exchange number selection, where the DoorPhone is connected, the DoorPhone is ringing and when set number of rings is over, the DoorPhone will pick up and it is possible to speak. The possibilities are the same as with outgoing call.

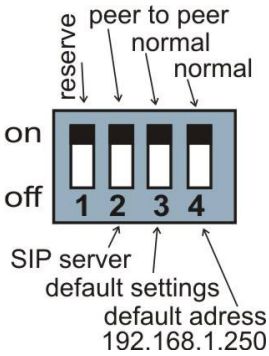
3 Programming of Parameters

3.1 Basic VoIP settings

3.1.1 Choosing a mode and login

It is important to choose a DoorPhone mode first. The DoorPhone can work in the PeerToPeer mode or SIP server mode. The mode setting can be made by a relevant switch (DIP switch see on picture 7). In the SIP server mode is possible to choose SIP server (external). It can be set in a configuration interface of the DoorPhone.

Setting values in doorphone to the firm setting make by DIP switch 3 move to the position off and reboot doorphone. After reboot system this switch is necessary return to the position On.



Picture 7 DIP switch setting

Setting of basic IP address 192.168.1.250 make by DIP switch 4 move to the position off and reboot doorphone. After reboot system this switch is necessary return to the position On.

Reboot doorphone it is possible make by double ways – partly turn it off and on again, or clicks on „Restart", in WEB site is at the entry service.

IP address of doorphone is from the manufacturer (as well as default) setting on 192.168.1.250. If you are at installation in other numbering nets (= NOT BEGINING 192.168.1.xxx) so is necessary setting in feature of protocol TCP/IP in your PC IP address either temporarily or like alternative configuration e.g . 192.168.1.245 . Then it is possible setting parameters of doorphone including new IP address and after reboot VoIP module in doorphone you can attach to WEB sites of the doorphone already on new IP address.

ATTENTION: DIP switch 3 and 4 must be in position "On", otherwise new IP address after reboot module is re-write back on starting IP address = 192.168.1.250.

In your web browser enter IP address of the DoorPhone, default is 192.168.1.250. See picture 8.

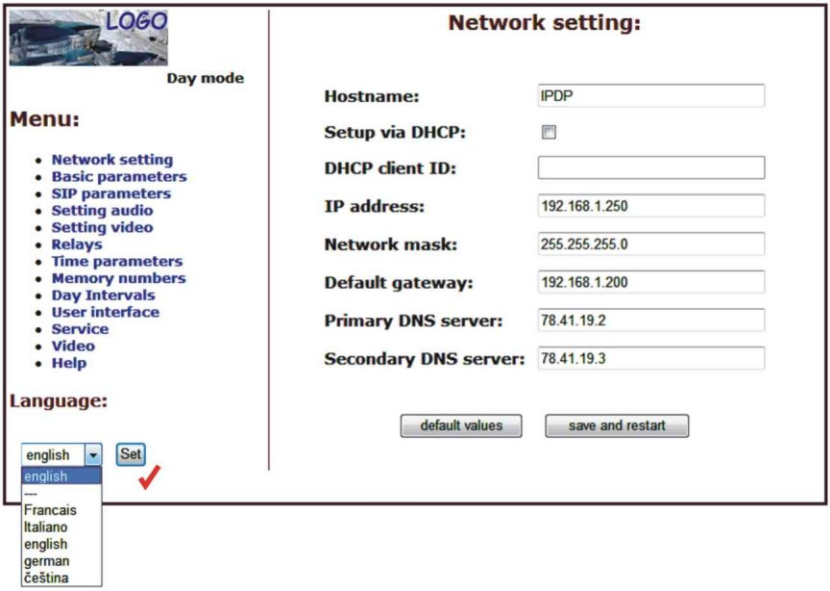
Picture 8 First site - video from camera

Enter user name and password. User name is „admin“, default password is „1234“. See picture 9.

Picture 9 Login to setup

3.1.2 Language option

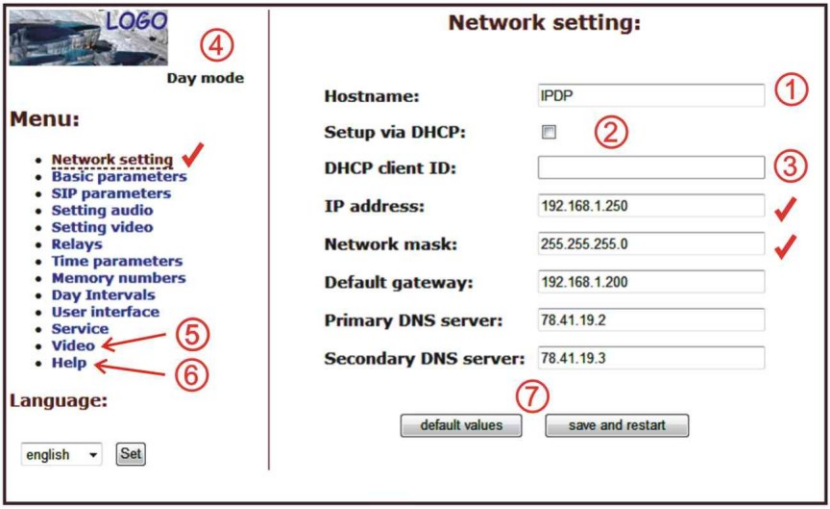
Language setting can be made in a menu on the left panel. Adding language is description on page 29



3.1.3 Network settings

Network settings are located in the **Network seting** menu item. It is possible to use DHCP service (1) or you can enter IP addresses manually.

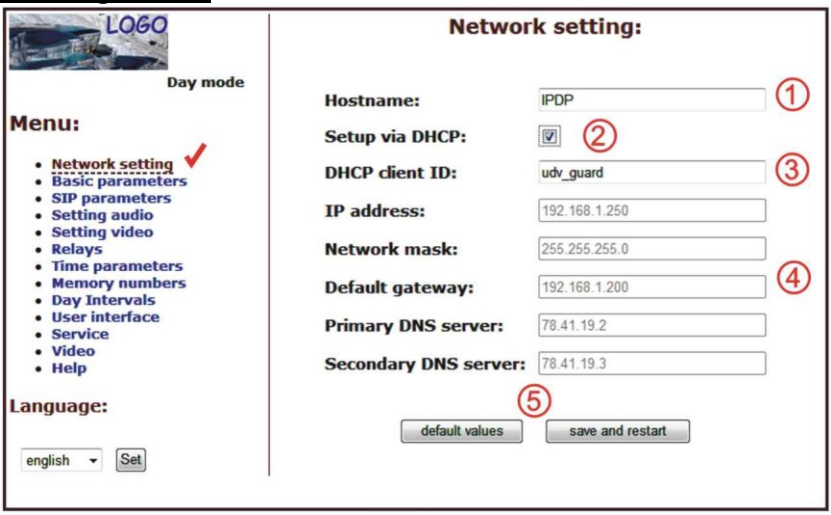
Manual configuration:



After making changes click on a **save and restart** button.

1. Hostname – name of doorphone for resolution in nets (e.g . while using more doorphones – more entrance)
2. Enable/disable ethernet settings via DHCP
3. Setting IP address, mask, eventually next network parameters, in case obscurity contact his IT manager
4. Display actual mode of IPDP – day / night
5. Return on introductory WEB site with display videos from cameras IPDP
6. short help for quick assistance in setting the parameters1 –
7. Default value – presetings to the firm settings. After making changes click on a save and restart button (display screen - see page 31).

DHCP configuration:



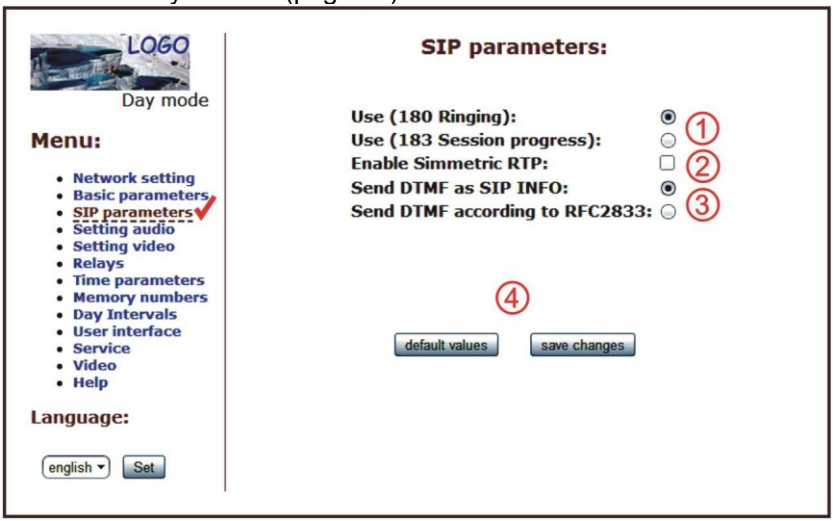
After making changes click on a **save and restart** button.

1. Hostname – name of doorphone for resolution in nets (e.g . while using more doorphones – more entrance)
2. Enable/disable ethernet settings via DHCP
3. DHCP client ID is name, which using for assigning two IP address to only thing the MAC address (in IPDP porter has meaning as far as will be including internal SIP server)
4. display parameters automatically assign by DHCP - IP address and next setting
5. Default value – presetings to the firm settings. After making changes click on a save and restart button (display screen - see page 31).

Important: *if you use setup via DHCP, then it's assigning IP address to DoorPhone automatically and network administrator must tell you actual address, to was possibility display video in web browser. Because assigning IP adress can change after e.g . failure power supply in object, so they recommended enjoy DoorPhone with fixed IP address.*

3.1.4 Peer to peer or SIP server connection

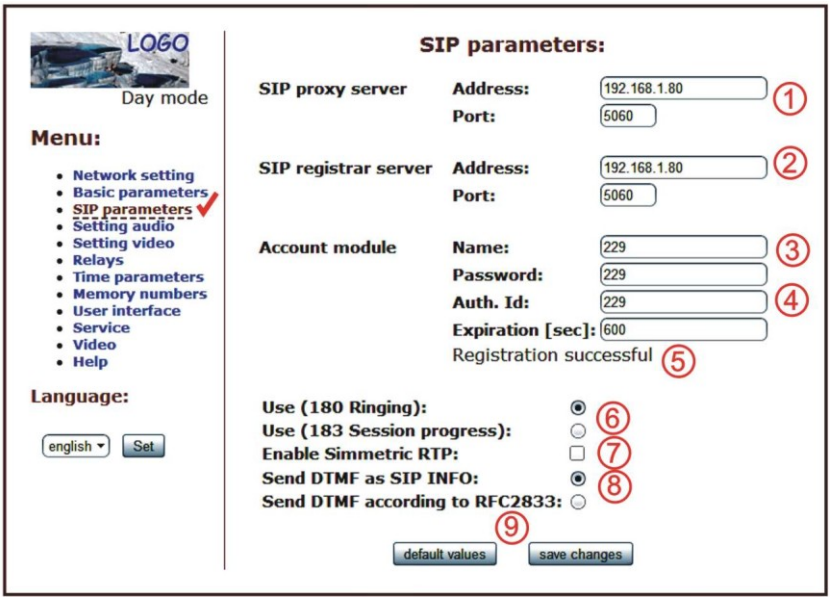
The DoorPhone can be set to the **peer to peer** (P2P) mode or to the SIP server mode by DIP switch (page 17). In P2P mode DoorPhone calling IP adress – in memory buttons (page 38).



After making changes use the **save changes** button.

1. choice signalling of incomming call by default Ringing, possible change on Session progress - added for some SIP proxy servers that the it require
2. Symmetrical RTP - added for some SIP proxy servers that the it require
3. Possibility to change the sending of DTMF DoorPhone (inband is not supported)
4. Default value – presetings to the firm settings. After making changes use the save changes button.

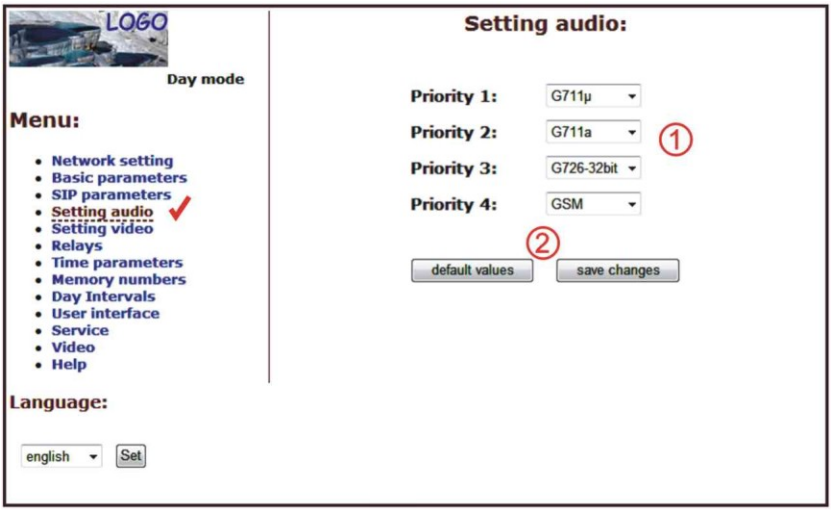
If you setting **SIP server mode** by DIP switch, so change site of SIP parameters



After making changes use the **save changes** button.

1. SIP proxy server IP address or SIP server name and port (usually 5060/5061) - via the server connection is made
2. SIP registrar server IP address or SIP server name and port (usually 5060/5061) - on this site registration is made, if you do not, so registration is done at the SIP proxy server
3. Registering data to SIP proxy server (aren't obligatory)
4. Name of the participant, usually a phone number to DoorPhone (the line to which is attached)
5. Expiration is interval of sending requests for re-registration in SIP server
6. choice signalling of incomming call by default Ringing, possible change on Session progress - added for some SIP proxy servers that the it require
7. Symmetrical RTP - added for some SIP proxy servers that the it require
8. Possibility to change the sending of DTMF DoorPhone (inband is not supported)
9. Default value – presetings to the firm settings. After making changes use the save changes button

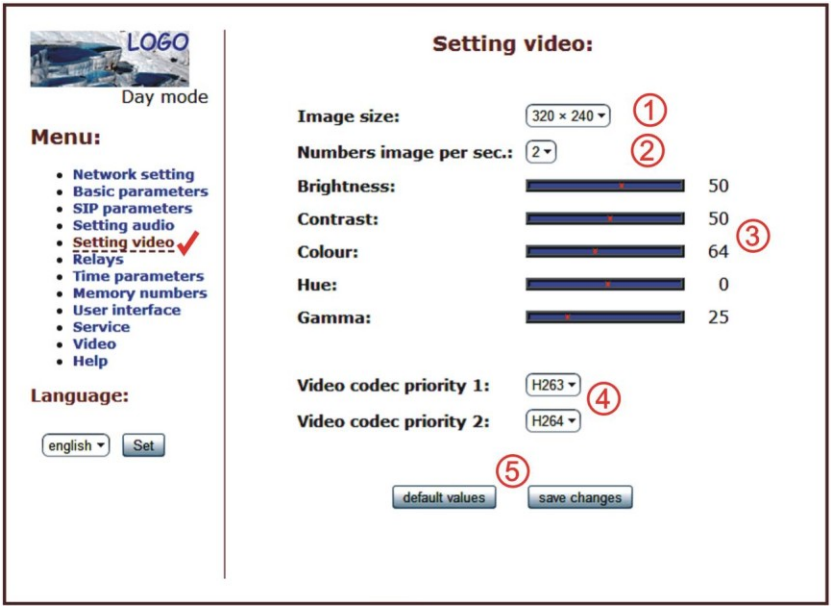
3.1.5 Audio codec setting



After making changes use the **save changes** button.

1. There is choosing only priority using audio codecs, used codec is selection automatically at make audio connection in SIP protocol.
2. Default value – presetings to the firm settings. After making changes use the save changes button.

3.1.6 Setting video



After making changes use the **save changes** button.

1. Resolution display video
2. Number picture per second (frequency restoring picture)
3. Setting next parameters of camera
4. choice of priorities for the use of codec H.263 / H.264, if not select any codec, and sends the video call. This option is important for some VoIP systems, the presence of video call causes the inability to make calls
5. Default value – presetings to the firm settings. After making changes use the save changes button.

3.1.7 Viewing the video (programme PopUp)

Video in doorphone IPDP is capture by USB WEB camera. Picture from camera is sending partly like series JPEG pictures to the environment WEB browser (first page on IP address IPDP doorphone) and second method is, that IPDP sending stream video in coding H.263 and in future H.264. This stream video is possible watch e.g . on telephone Grandstream series GXV3000, which has big LCD display.

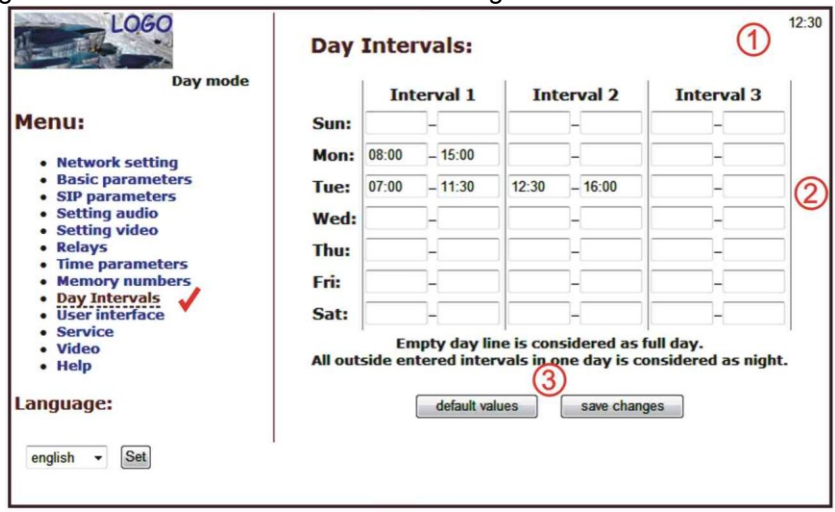
Next interesting way watching videos from IPDP is install PopUp program UDVGUARD for Windows. This programme also with manual is freely download on http://www.alphatech.cz/engl/e_ipdp.htm. Programme except display the video has even this interesting functions:

- at conversation IPDP is program automatically activate from system tray of Windows to the foreground and display picture from IPDP, after termination talk again minimalize (function PopUp)
- makes it possible switch on by click both relay in IPDP – opening door
- makes it possible acoustic connection with IPDP – if doorphone call on address PC with installed and running programme, so it is possible receive conversation from IPDP through the medium sound card in PC. Click on button DoorPhone in program it is possible reversely call to IPDP
- programme it is possible install to the max.100 computers in net, if is active connection with IPDP, so to all computers with running program maximize window with displayed video. In programme is adjust IP address of doorphone, thereby it is possible in one nets operate more Slim IPDP and to which IPDP programme is coresponded individual "Hostname" setting to page.20 and this Hostname is displays in header of programme PopUp.

Parameters of video is on page 40

3.1.8 Day intervals

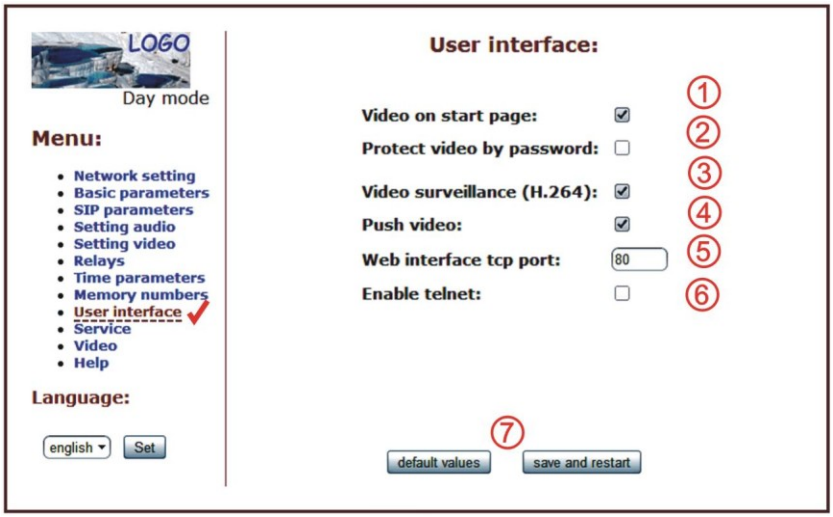
Display only if you check automatic switch Day/Night mode on Basic parameter - page 33. Function with firmware V5.8 and higher.



After making changes use the **save changes** button.

1. Display actual internal time (you must setting in "Service" time server)
2. Table of time interval - interval is meaning where is day, the rest is night. For example: interval 1 = 08:00-12:00, interval 2 = 14:00-17:00 - from 00:00 to 7:59 is night, from 8:00 to 12:00 is day, from 12:01 to 13:59 is night, from 14:00 to 17:00 is day and from 17:01 to 23:59 is night.
3. Default value – presetings to the firm settings. After making changes use the save changes button.

3.1.9 User interface



After making changes use the **save changes** button.

1. Possibility switch off displaying videos on start page - safety device
2. Additional security is password protection to secure access to http://ipaddress/video.jpeg (image from the camera).
   ATTENTION: this option has the effect that stops function the program PopUp and videos on the SNOM phone !
3. Video surveillance (H.264) video is (so far H264) provided by the communicator (the server) protocol RTSP on port 554. Can a reasonable player stream video (IP television) (such as Grandstream, MPlayer, VLC, and surely many others). This video is still independent of the calls in the future is expected to broadcast over IP multicast to multiple recipients simultaneously.
   Video surveillance checkbox enables RTSP protocol which serves for video parameters negotiation between video receiver (player) and video server (VoIP Guard).
   This protocol uses TCP port 554. Now is supported video encoded by H263 and H264 codecs and then transported via network by RTP protocol. Information about all protocols could be found on www.wikipedia.org. URL usually needed for player (vlc, mplayer, maybe others) connection is 'rtsp://192.168.1.250'.
   In this case default (first priority) codec is used. To force particular encoder, use:
   'rtsp://192.168.1.250/video.263' for H263 encoded video, or 'rtsp://192.168.1.250/video.264' for H264 encoded video.

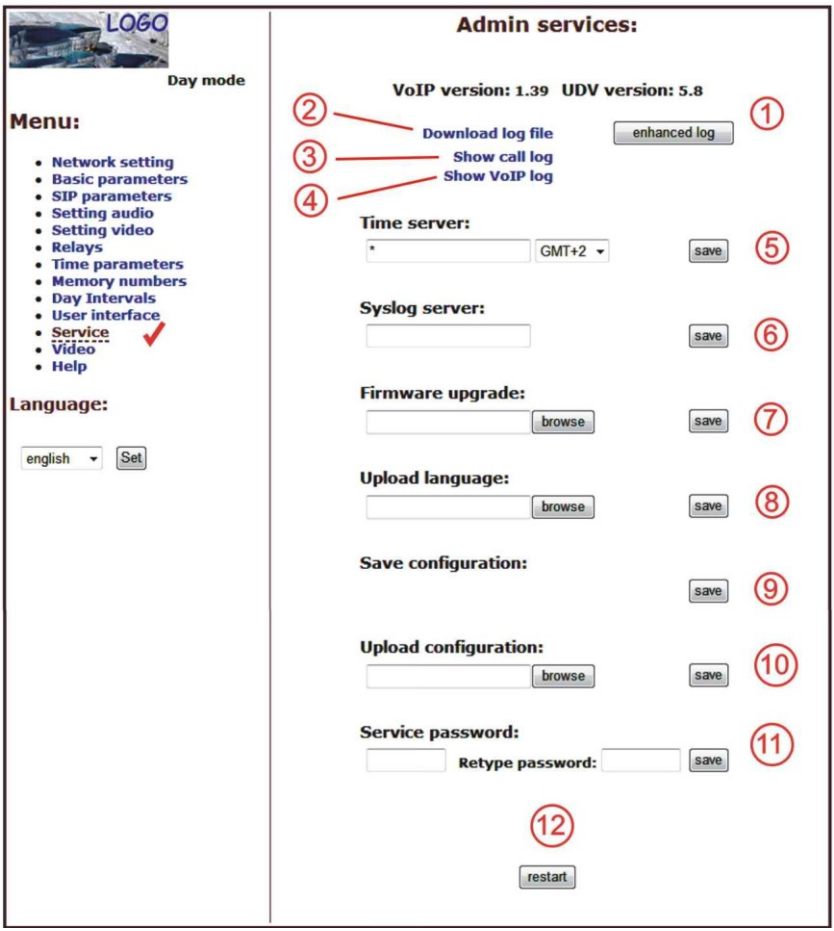
In some cases also helps to add parameter about frame rate (for example for mplayer it is '-fps 5').

Full command line example for mplayer is:

mplayer -fps rtsp://192.168.1.250

4. Push video is the choice for phones SNOM when the script was sent to the phones provide a video display on this phone
5. Possibility change port from conventional 80 to other
6. Possibility disable / enable access over telnet (name: root, pass: 8765)
7. Default value – presetings to the firm settings. After making changes use the save changes button..

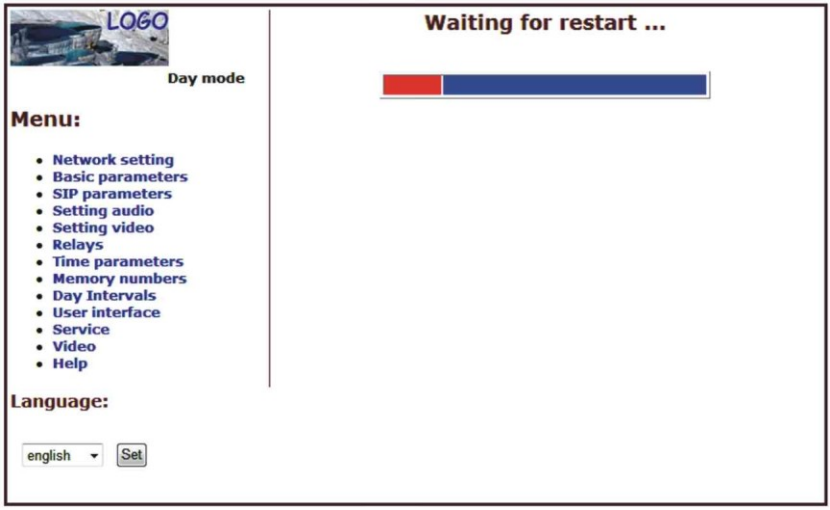
3.1.10 Service settings



1. display current version of firmware in module VoIP and in module doorphone. Button "Basic LOG" or "Extended LOG" displays to the what state LOG switch, it means you see "Extended LOG" so they switch to the basic LOG and back to, in short switch you have such LOG, which don't see writing on button.
2. Click on "Download log file" file save to you choice place. File has extension ".BIN", this is necessary rename on ".TAR". To unpacking archive "tar" use e.g . programme "PowerArchiver". File from file equip extension ".TXT". Last notice is thereon, that the text file hasn't standard ending rows CR LF but only LF. To safe display get past e.g . programme "PSPad".
3. Click on "Show call log" will display history of call for SIP - only call instructions.

   Show register log - here's displayed action registration and result - successful/unsuccessful
4. Click on "Show VoIP log" start VoIP monitor - log file which is running in new browser window - online displays events.
5. Time server is IP adress of NTP server with time data (actual time in module VoIP is displayed in "Day intervals") if doesn't know address of NTP, you use * and system automatic choose acceptable (to the little window write * and click on save).
6. Syslog server is IP adress of computer where is running syslog aplication for collection network events
7. tool for upgrade firmware in module VoIP and in module doorphone, switching automatic - information is in upload fille. Next in this tool is possible change environment of WEB sites - colours, fonts, frames…
8. Addition / change language file - upload fille with language assignment
9. Save configuration - save actual setting in IPDP (all features)
10. Restore configuration - restores setting of all IPDP from file previously storage configuration
11. Change access password, default is 1234
12. Reboot VoIP module.

3.1.11 Restart



3.1.12 Preparation style, language support

File of style consist of three files packaged to the archive ".TAR".To unpacking file "tar" use e.g . programme "PowerArchiver".

First file "upload_fw.sh is header file of style and this please didn't have.

Second file is HTML style in syntax HTML, it is possible change font size, fonts, colours character and lines, background colour. To reliable display get past e.g . programme "PSPad".

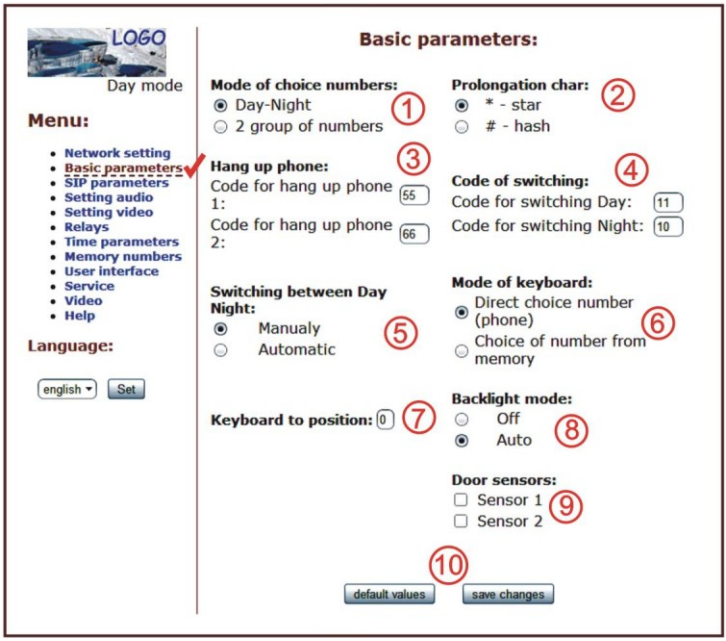
Third file is picture (logo your firm) sizes to the 200x200px in format GIF, JPG, prefer GIF with setting transparent background, remove so rectangle around your logos. Picture then rename on "logo.img"

To compress file use e.g . programme "PowerArchiver", set archive "tar" and option "tarred".

Basic file for creation translation to the other language. Go out from English or Czech, translation includes also text of Help. Name of file is name language in menu, therefore are not using . and extension, for editing use e.g . programme "PSPad".Translating only terms in quotation mark, preserve markings HTML formatting. Character set is setting to ISO8859-2.

3.2 Setting DoorPhone parameters

3.2.1 Basic Parameters



After making changes use the **save changes** button.

1. Mode of DoorPhone choice selects number per **Day/Night** DoorPhone mode or selects numbers of the first and second groups.
2. Sign for call extension * or # (10sec before call end the DoorPhone will send a notice, then the call may be extended)
3. Two commands in order to hang up the DoorPhone using both switches [1 or 2 digits]. The advantage is to set the same command both for switch closing and command to guard hanging up (page 35). Single digit command is entered as the first character to replace with "star" *. For example, 2-digit code to shorten it to 55 single-typing * 5 The command is then evaluated with only one pressing 5 on the phone.
4. Command for **DAY** / **NIGHT** mode switching
   Note: The switchover to Day/Night mode remains set in IPDP even after power supply disconnection.
   Single digit command is entered as the first character to replace with "star" *. For example, 2-digit code to shorten it to 11 single-typing * 1 The command is then evaluated with only one pressing 1 on the phone.
5. Automatic or manual switching Day - Night mode. Automatic switch setting in "Day interface".
6. hasn't in this design sense, because isn't possible to connect keyboard

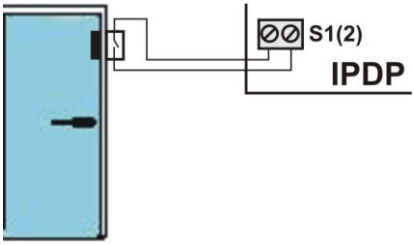
7. hasn't in this design sense, because isn't possible to connect keyboard
8. Possibility to turn off the camera for night illumination
9. Attention this option is required to detect the presence of inputs for sensors in your IPDP. Door sensors are sensors (eg magnetic contacts or part of electrical lock) to inform the opening / closing doors. Check this option to display the status of the door to the home screen video and sends this information to the program UDVguard where it is displayed.
10. Default value – presetings to the firm settings. After making changes use the save changes button.

ATTENTION! This parameters setting will sharply influence whole DoorPhone function.

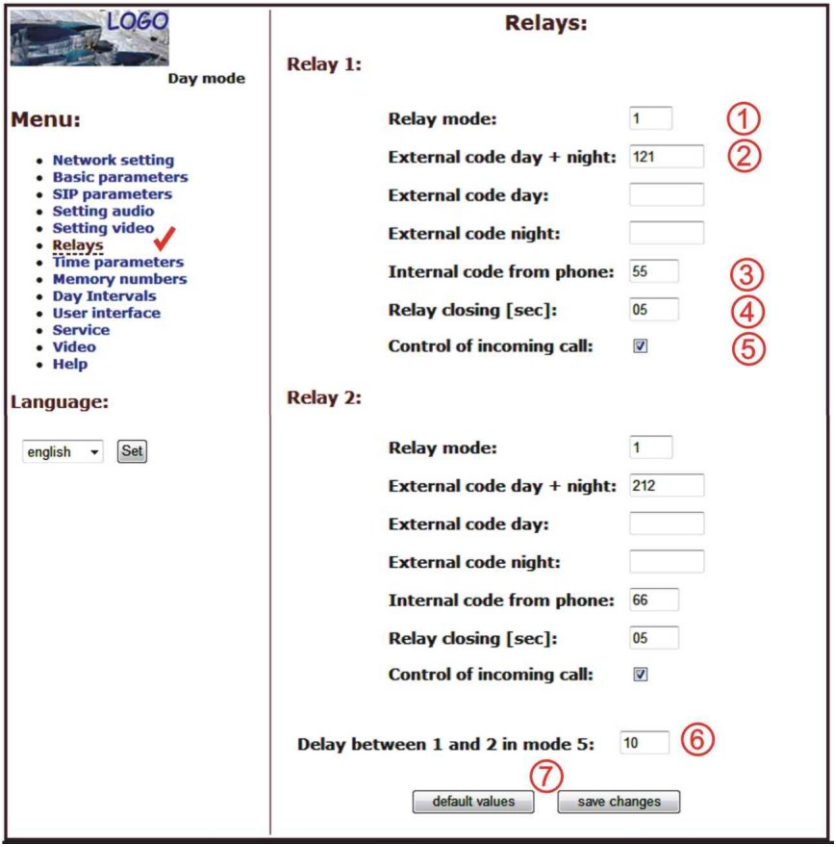
3.2.2 Sensors of open the doors

1. On the home screen when checked, the sensor 1 and sensor 2, a key information, which shows the status of open (open) or closing (close) the door

Attention: The function is available only for doorphones equipped with inputs for these sensors The sensor is a contact at the door (eg magnetic contact security or use the contact is contained in an electric lock, etc.), which is closed and closed the door open when you open.



3.2.3 *All about relays*

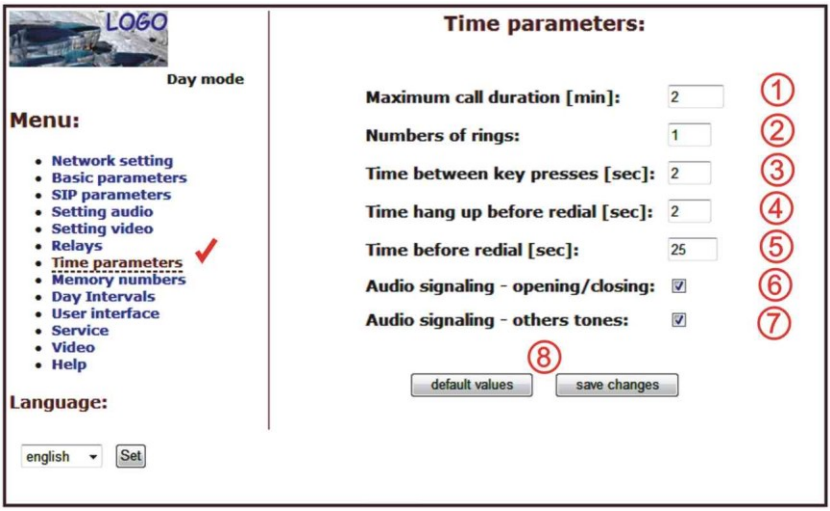


After making changes use the **save changes** button.

1. Relay mode:
   - **=1 switch** mode – it will close on command or password for period $t_{1/2}$ (used for electrical locks, gate opening etc.)
   - **=2 camera** mode – it will close by guard pick up and open by hanging up.
   - **=3 lighting** mode – it will close by guard pick up and stay closed even for period $t_{1/2}$ after guard hanging up.
   - **=4 bell** mode – it will close after button pressing and open after period $t_{1/2}$ (used for e.g. external bell or horn connections).
   - **=5 gradual opening** mode – in this mode the only relay 2 will be set together with relay 1 set to mode 1. The relay 1 is activated for period t_1, then the time t_3 is proceeding before relay 2 closing. Then the relay 2 is activated for t_2 period and afterwards the DoorPhone hangs up.
     Note: *The only relay 1 can be activated from phone and all sequence started. Besides that the relay 2 can be separately activated from buttons by password.*

2. password for relay closing from buttons or keyboard [2 to 6 digits]. Total 6 passwords, they are controlled by Day/Night; the combination is entered either by DoorPhone buttons (first 1/2 buttons) or from attached keyboard (after pressing of key symbol). The relay closing influences the set switch **mode** and **Day/Night** switchover. By setting of choice mode of **2 number groups** the DoorPhone is permanently in **DAY** mode.
   By password choice some rules have to be observed:
   - Select passwords in way not to find its combination out from wear of certain buttons by frequent use.
   - Select the first password button from frequentless button for direct dialing (-extends choice time)(-not valid for keyboard).
   - Pay attention to congruity of password numbers when one password includes other one, e.g. relay 1 has 1212 and relay 2 has 12121. Then after second pressing button 2 the only relay 1 is called, but password choice 212 for relay 2 can call both relays after secon pressing button 2.
3. Command from phone after relay closing [2 digits]. The same command can be set for both relays, then they are activated at the same time. The advantage is to set the same command both for relay closing and command to DoorPhone hanging up (page 33).
   Single digit command is entered as the first character to replace with "star" *. For example, 2-digit code to shorten it to 55 single-typing * 5 The command is then evaluated with only one pressing 5 on the phone.
4. Duration of relay closing in second [2 digits 01-99]
5. To prohibit the control during incoming call is important e.g. when using relay 2 in mode 1 for control of garage gate opening, when the electronics opens the gate and the gate is closed by car passage. Then the control from phone could undesirably cause the permanent gate opening (not closed – no car passage).
6. time in second between close relays 1 and 2 by mode setting of relay 2 is **5** (gradual opening) [2 digits 01-99]
7. Default value – presetings to the firm settings. After making changes use the save changes button.

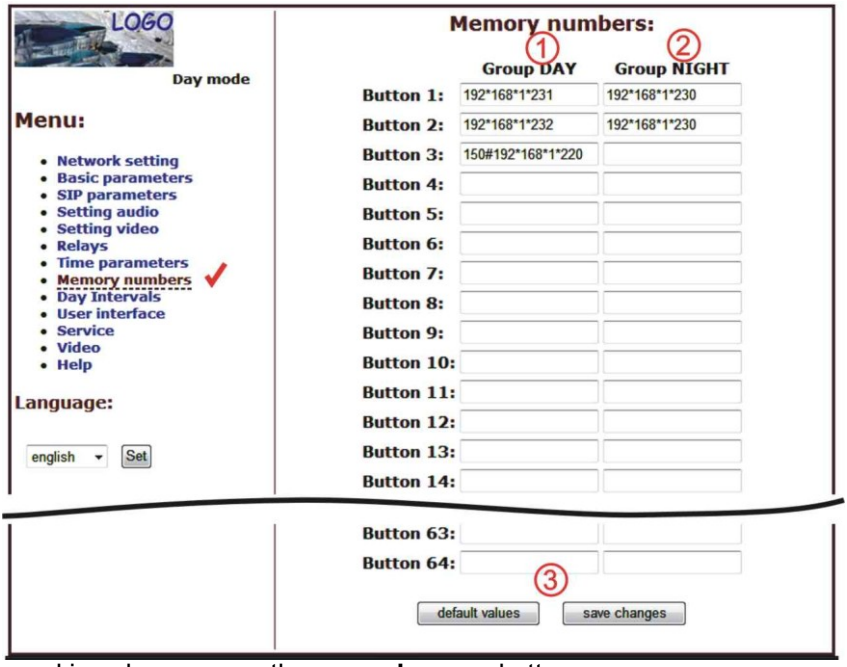
3.2.4 Time Parameters



After making changes use the **save changes** button.

1. max. time, for which the DoorPhone is hanging up, this time can be extended during call by sign choice from telephone (* or #) – see page 33.
2. Number of incoming call rings, the DoorPhone pick up after preseted number of rings. After detection first ring – LED on front panel blinking. The number can be set from 1 to 9.
3. max. time [sec] among button presses [range 1-9]
   switch closing – if time between two next presses is bigger than **w** time, the code is not evaluated correctly.
   dialing – if the button, we are pressing, is the first password number for switch closing, so the choice is delayed by this **w** time**.**
4. time [sec] for which the guard will hang up, before repeated dialing (button pressing during call or dialing, busy tone detection) [range 1-5]
5. after finishing the dialing it calculates time (ringing tones). If the number exceeds time in second, it will hang up [range 10-99]. The dialing is repeated in case, when the dialing mode of 2 groups is set.
6. In default is status of DoorPhone signalling acoustically. If signalling makes problem, so this signalling pick up / hang up prohibited.
7. In default is status of DoorPhone signalling acoustically. If signalling makes problem, so this signalling others tones prohibited.
8. Default value – presetings to the firm settings. After making changes use the save changes button.

3.2.5 Direct Dialing – Memories



After making changes use the **save changes** button.

1. telephone number up to 16 digits, we want to store. The numbers are the numbers of the **first group** or numbers of **Day** mode. In default setting is table memoirs empty. While using setting P2P to the memoirs saves IP address e.g . 192*168*1*250, where „*“ means „.“ , while using SIP proxy server to the memoirs saves phone number e.g. 117.
2. telephone number up to 16 digits, we want to store. The numbers are the numbers of the **second group** or numbers of **Night** mode. In default setting is table memoirs empty. While using setting P2P to the memoirs saves IP address e.g . 192*168*1*250, where „*“ means „.“ , while using SIP proxy server to the memoirs saves phone number e.g . 117.
   Note: The switchover to Day/Night mode remains set in DoorPhone even after power supply disconnection.
3. Default value – presetings to the firm settings. After making changes use the save changes button.

4 Technical Parameters

4.1 Electrical Parameters

Parameter	Value	Conditions
Communication interface	Ethernet 10BaseT, 100BaseTx	
VoIP protocol supported	SIP	
Audio	G.711u, G.711a, G.726-32b, GSM	
Video	série JPEG, MJPG, stream H.263 (CIF), H.264	
Band width	300Hz – 3400 Hz	
Power supply - adapter	12Vss ± 2V , 12Vst ± 1V	
- or PoE	IEEE802.3af Altern. A+B	
Max. consumption	300mA	12Vss
Max. voltage of switch contact	48V	at I < 1A
Max. current of switch contact	2A	at U < 30 V
Operational temperature	- 20 to + 70°C	

4.2 Mechanical dimensions

Type of item	dimensions HxWxD [mm]
Slim IPDP-01	185 x 99 x 40
Slim IPDP-02	185 x 99 x 40
Slim IPDP-01C	185 x 99 x 40
Slim IPDP-02C	185 x 99 x 40
Slim IPDP-01C antivandal	185 x 99 x 40

Protection against water and insinuation objects of all types doorphones is IP44

4.3 Parameters of video, access

Video for WEB:

InternetExplorer - (batch JPEG pictures - port 80) is used over and over again repeated http request ADRESA/video.jpg
Mozilla, opera, Firefox … and programme PopUp (UDVguard) - (MJPEG stream - port 80) is used http request ADRESA/video.mjpg (sometimes it is necessary reload than it start up).This video is continuous and has smaller load nets.

Stream video for IP phones:

H.263 - IPDPvrátný and videophone settling over SIP/SDP protocol on standard SIP port and video (also sound) then runs by RTP protocol on ports settle over SIP (usually 9078).

Parameters of video:

JPG pictures creates in camera and for all transport protocol are same
Size (resolution) of video selects in "Setting video" on WEB
Maximum size is given by type USB camera and mostly is 640x480
Stream H.263 knows only CIF resolution (352x288), so that bigger JPEG is cuts and smaller will frame
Frequency (1 5obr./sec) JPG pictures selects in "Setting video" on WEB
Frequency MJPG and Stream H.263 comes from camera, will use every second and result is moves among 7- 12 fig./sec

Ports:

Port **80** for http (WEB pages and JPG (MJPG) video on them)
Port **5060** for SIP
Ports RTP with adverse party reason with over SIP, usually suggests port **7078** for audio and port **9078** for video
Video port **554** not (yet H264) provided by doorphone (server) protocol RTSP

Telnet: name: root / password:876
Setup: Default IP address 192.168.1.250
name: admin / password: 1234

Guarantee conditions:
The product was shop-checked. The producer guarantees that this product will keep the features described in these operating instructions in the course of guarantee provided that the user will be handled with it as described in the operating manual. The guarantee will be extended by period of possible guarantee repair.
When claiming in guarantee period please contact your dealer. The producer only will make the guarantee repairs. Attach the description of claim reason, proof of purchase and your exact address to the product.
The guarantee does not include:

- mechanical, thermal, chemical and other damages caused by user's activities
- defects caused by natural disasters
- defects caused by repair or changes carried out by user or other unauthorized person
- willful damage of product
- incorrect use of product caused by other use than specified in operating manual (e.g. installation, programming)
- damages caused during product transport to customer and from supplier

Producer:
Dealer:
Date of sale:

ALPHA Tech

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